

WHAT IS CLAIMED IS:

1. A method of uprating electric machines including a stator core with stacked lamination packages, the method comprising:
removing at least a last one of the stacked lamination packages at each end of the stator core; and
re-stacking the removed lamination packages with a lower core loss material.
2. A method according to claim 1, wherein the stacked lamination packages comprise grain-oriented iron silicon punching (M-6) having a with-grain core loss of about 0.573 at 1.5 T (W/lb), and wherein the re-stacking step comprises re-stacking the removed lamination packages with a higher grade grain-oriented iron silicon punching having a with-grain core loss less than M-6.
3. A method according to claim 1, wherein the re-stacking step comprises re-stacking the removed lamination packages with M-4 iron silicon punching.
4. An electric machine comprising a stator having a stator core with stacked lamination packages, at least a last one of the stacked lamination packages at each end of the stator core comprising a lower core loss material than a remainder of the stacked lamination packages.
5. An electric machine according to claim 4, wherein the remainder of the stacked lamination packages comprises grain-oriented iron silicon punching (M-6) having a with-grain core loss of about 0.573 at 1.5 T (W/lb), and wherein the at least last one of the stacked

lamination packages comprises a higher grade grain-oriented iron silicon punching having a with-grain core loss less than M-6.

6. An electric machine according to claim 4, wherein the remainder of the stacked lamination packages comprises M-6 iron silicon punching, and wherein the at least last one of the stacked lamination packages comprises M-4 iron silicon punching.

7. An uprated electric machine assembled according to the method of claim 1.